Mailed: August 27, 2003

Filing Due Date: October 27, 2003

#### NOTICE OF GROUND OF REJECTION

Applicant

: Mitsubishi Denki Kabushiki Kaisha

Attorney

: First Law Offices of Korea

Pat. Appln. No.

: 10-2001-0058570

Title of the Invention : Semiconductor Device and Manufacturing Method of

the Same

This is to notice, under the provision of Article 63 of the Patent Law, that the grounds for rejection as specified below are found as a result of examination of the present application. If the applicant has any argument or wishes to make amendments, please file a response or an amendment by October 27, 2003. (The due date is extensible one month at a time. Any notification acknowledging such extension will not be issued.)

#### Grounds

The invention as specified by the claims 1 and 2 of the present application could have been readily made by a person skilled in the art before the filing of the present application from the references specified below. Accordingly, a patent cannot be granted thereto under the provision of Paragraph 2 of Article 29 of the Patent Law.

#### Remarks

Claims 1-2 of the present application is directed to a semiconductor device and a method of manufacturing the same, wherein a surface of an active region of a semiconductor substrate is entirely rounded so as to be inclined downward toward an isolation region of a bird's beak. Impurities are implanted into the active region through a first insulating film and a bird's beak portion, and after the first insulating film is removed, a gate electrode is formed with a second insulating film interposed. The invention in Cited Reference 1 (Korean Patent Laying-Open No. 1993-9059) discloses a method of forming a semiconductor device including an active region having a rounded surface and being inclined toward an element-isolating film (Fig. 2). The invention in Cited Reference 2 (Japanese Patent Laying-Open No. 2000-200878) discloses a method of manufacturing a semiconductor device, including implanting an impurity for threshold voltage onto an insulating

film on an activ region that is entirely rounded over a sharp portion of a surface of a semiconductor substrate, followed by a subsequent step (Figs. 16-25). The present invention could easily have been made by those having ordinal skills in the art in view of the inventions in Cited References 1 and 2.

## [Appended Documents]

Reference 1 Korean Patent Laying-Open No. 1993-9059

Reference 2 Japanese Patent Laying-Open No. 2000-200878

Ø1002/006

Docket N .: 57454-162

PATENT

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Customer Number: 20277

Yukio MAKI

Confirmation Number: 2289

Serial No.: 09/909,975

Group Art Unit: 2811 Allowed: October 22, 2003

Filed: July 23, 2001

Examiner: S. Gebremariam

For: SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD OF THE SAME

#### REQUEST FOR ACKNOWLEDGEMENT OF THE CITED ART

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# Match and Return

Sir:

We are in receipt of the Notice of Allowance dated October 22, 2003.

In reviewing the file, it is noted that we have not received acknowledgement of the Information Disclosure Statement and cited art filed November 24, 2003. Enclosed are copies of the Information Disclosure Statement, PTO-1449 and stamped return postcard acknowledgement.

Applicant hereby respectfully requests that:

the appropriately acknowledged PTO-1449 be furnished to Applicant; and the record be clarified to confirm that the cited art has been considered and made of

record.

600 13th Street, N.W.

Washington, DC 20005-3096 (202) 756-8000 SAB:cg Facsimile: (202) 756-8087

Date: December 12, 2003

Respectfully submitted,

RMOIM WILL & EMERY

Stephen A. Becker

Registration No. 26,527

by certify that this paper is being fo

McDermott, Will & Emery 600 Thirteenth Street, N.W.

Washington, D.C. 20005-3096 202-756-8000

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PAGE 1/6 \* RCVD AT 12/12/2003 9:32:21 AM [Eastern Standard Time] \* SYR:USPTO-EFXRF-1/2 \* DNIS:8729306 \* CSID:202 756 8087 \* DURATION (mm-ss):01-28

Docket No.: 57454-162

#### PATENT

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In re Application of

Customer Number: 20277

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Group Art Unit: 2811

Filed: July 23, 2001

Examiner: S. Gebremariam

For: SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD OF THE SAME

#### INFORMATION DISCLOSURE STATEMENT

Mail Stop IDS Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee.

# REQUEST TO CONSIDER REFERENCES AFTER CLOSE OF PROSECUTION AND BEFORE PAYMENT OF ISSUE FEE

The undersigned hereby requests consideration and entry of this Information Disclosure

Statement and accompanying references under 37 CFR 1.97(d).

Please charge the processing fee under 1.17(p) of \$180.00 to Deposit Account 500417.

PAGE 4/6 \* RCVD AT 12/12/2003 9:32:21 AM [Eastern Standard Time] \* SVR: USPTO-EFXRF-1/2 \* DNIS:8729306 \* CSID:202 756 8087 \* DURATION (mm-ss):01-28

09/909,975

#### **CERTIFICATION PARAGRAPH**

The undersigned certifies that, to the best f his knowledge, each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement as described in 37 CFR 1.97(e)(1).

Each non-English language reference was cited in a corresponding foreign application search report or office action and its relevance discussed therein. A copy of the foreign search report or office action, together with an English language version thereof, is attached for the Examiner's information.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

Registration No. 26,106

600 13th Street, N.W. Washington, DC 20005-3096 (202) 756-8000 AJS:tib Facsimile: (202) 756-8087

Date: November 24, 2003

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